## Updated: February 5, 2024

# TIMOTHY FEENEY

Chapel Hill, North Carolina, United States

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### BRIEF PERSONAL STATEMENT

I am currently a research editor at The BMJ and a PhD student in the Epidemiology department of University of North Carolina, Chapel Hill. My interests are the application of advanced epidemiological methods to observational studies in healthcare; particularly in general surgery and critical care. I have a keen interest in epidemiologic methods, biostastistics, and epistemology. I am also passionate about education of research methods, and enjoy bringing advanced methods to a broader audience of researchers and clinicians.

My interests outside of science and math involve my family (wife and 2 daughters), museums, reading and finding great bargains on used books, hiking, exercising, and SCUBA diving on deep wrecks and inside caves.

### **EDUCATION**

Master of Public Health May 2017

Harvard University T.H Chan School of Public Health, Boston MA.

Quantitative Methods; focus on Epidemiology and Biostatistics

Doctor of Medicine May 2014

University of Maryland School of Medicine, Baltimore MD.

Master of Science May 2012

University of Maryland School of Medicine, Baltimore MD.

Medical Biochemistry

Bachelor of Science/Bachelor of Arts

May 2008

University of Maryland, College Park, College Park MD.

BS: Molecular Biology; cum laude

BA: Government and Politics; magna cum laude

High Honors in Chemistry and Biochemistry

Valedictorian Speaker for College of Chemical and Life Sciences Commencement

## CLINICAL TRAINING

Tufts Medical Center, Boston, MA 7/2015-6/2016

Residency, PGY2, General Surgery

Stamford Hospital, Stamford, CT 7/2014-6/2015

Internship, General Surgery

## CURRENT POSITION(S)

Research Editor 04/2019-Present

The British Medical Journal (BMJ)-London, UK.

Head of research and reporting methods (RMR) section. Head of Christmas research 2022 and 2023. Handle all classes of research submissions, commission editorials and other content. Design and implement policies pertaining to the research section.

### PhD Student in Epidemiology

08/2020-Present

Dept. of Epidemiology-UNC Chapel Hill, Chapel Hill NC.

Graduate Advisor: Steve Cole

Focus on epidemiologic methods and clinical epidemiology, with particular interest in causal inference. Current focuse is methods to obtain more useful estimates from randomized data and real world evidence such as data fusion and per protocol estimation.

## Graduate Research Assistant

01/2021-Present

Gillings School of Global Public Health-UNC-Chapel Hill, Chapel Hill, NC.

Causal inference in observational studies. Supported by R01AI157758

Advisor: Steve Cole, Jessie K. Edwards Projects: Double Robust Methods for inference in observational and randomized studies.

## Study design and analysis consultant

08/2022-Present

UNC School of Medicine, Department of Surgery-UNC-Chapel Hill, Chapel Hill, NC.

Support Department of Surgery in design and analysis of studies.

### PREVIOUS PROFESSIONAL EXPERIENCE

Consultant 05/2022-08/2022

RTI-Health Solutions-Research Triangle Park, NC.

Consultant for research studies encompassing pharmaceuticals and vaccinations.

## **Subject Matter Consultant**

05/2021-1/2022

iHeed-Dublin, Ireland.

Subject matter expert in epidemiology and biostatistics for online course development .

## **PUBLICATIONS**

## Peer Reviewed Research

Woods, Alison P, **Feeney, Timothy**, Avneesh Gupta, Philip E Knapp, David McAneny, and Frederick Thurston Drake. "Prospective Study of a Systemwide Adrenal Incidentaloma Quality Improvement Initiative". In: *Journal of the American College of Surgeons* (Dec. 20, 2023). DOI: 10.1097/XCS.000000000000930.

Woods, Alison P., **Feeney, Timothy**, Marianna V. Papageorge, Jennifer F. Tseng, Philip E. Knapp, David McAneny, and F. Thurston Drake. "Addressing Diagnostic Inertia Following Incidental Adrenal Mass Discovery in Patients with Hypertension". In: *Journal of Hypertension* 41.4 (Apr. 2023), pp. 680–682. DOI: 10.1097/HJH. 0000000000003371.

Feeney, Timothy, Andrea Madiedo, Philip E. Knapp, Avneesh Gupta, David McAneny, and Frederick Thurston Drake. "Incidental Adrenal Masses: Adherence to Guidelines and Methods to Improve Initial Follow-Up, A Systematic Review". In: *Journal of Surgical Research* 269 (Jan. 2022), pp. 18–27. DOI: 10.1016/j.jss.2021.07.041.

Sedrakyan, Art et al. "Advancing the Real-World Evidence for Medical Devices through Coordinated Registry Networks". In: *BMJ Surgery, Interventions, & Health Technologies* 4 (Suppl 1 Nov. 2022), e000123. DOI: 10.1136/bmjsit-2021-000123.

Stolarski, Allan E., Andrea Alonso, Sherif Aly, **Feeney, Timothy**, Florencia Pereira, Cullen Carter, Donald Hess, Luise I. Pernar, Brian Carmine, and F. Thurston Drake. "The Impact of English Proficiency on Outcomes after Bariatric Surgery". In: Surgical Endoscopy (Feb. 28, 2022). DOI: 10.1007/s00464-022-09148-3.

Woods, Alison P., Andrea Alonso, Swetha Duraiswamy, Carl Ceraolo, **Feeney, Timothy**, Christine M. Gunn, William R. Burns, Dorry L. Segev, and F. Thurston Drake. "Limited English Proficiency and Clinical Outcomes After Hospital-Based Care in English-Speaking Countries: A Systematic Review". In: *Journal of General Internal Medicine* (Feb. 2, 2022). DOI: 10.1007/s11606-021-07348-6.

Woods, Alison P., Frederick Godley, et al. "A Standardized Radiology Template Improves Incidental Adrenal Mass Follow-up: A Prospective Effectiveness/Implementation Study". In: *Journal of the American College of Radiology* (Dec. 2022), S1546144022008961. DOI: 10.1016/j.jacr.2022.11.011.

- Talutis, Stephanie D., Ellen Childs, Anna L. Goldman, Philip E. Knapp, Avneesh Gupta, Cleopatra Ferrao, Feeney, Timothy, David McAneny, and Frederick Thurston Drake. "Strategies to Optimize Management of Incidental Radiographic Findings in the Primary Care Setting: A Mixed Methods Study". In: The American Journal of Surgery (Mar. 2021), S0002961021001732. DOI: 10.1016/j.amjsurg.2021.03.038.
- Bala, Wasif, Jackson Steinkamp, **Feeney, Timothy**, Avneesh Gupta, Abhinav Sharma, Jake Kantrowitz, Nicholas Cordella, James Moses, and Frederick Thurston Drake. "A Web Application for Adrenal Incidentaloma Identification, Tracking, and Management Using Machine Learning". In: *Applied Clinical Informatics* 11.04 (Aug. 2020), pp. 606–616. DOI: 10.1055/s-0040-1715892.
- Crable, Erika L., **Feeney, Timothy**, Joshua Harvey, Valerie Grim, Mari-Lynn Drainoni, Allan J. Walkey, Katrina Steiling, and Frederick Thurston Drake. "Management Strategies to Promote Follow-Up Care for Incidental Findings: A Scoping Review". In: *Journal of the American College of Radiology* 18.4 (Dec. 2020), pp. 566–579. DOI: 10.1016/j.jacr.2020.11.006.
- Feeney, Timothy, Christine Park, Frederick Godley, Michael Cassidy, Teviah Sachs, David McAneny, Jennifer F. Tseng, and Frederick Thurston Drake. "Provider-Patient Language Discordance and Cancer Operations: Outcomes from a Single Center Linked to a State Vital Statistics Registry". In: World Journal of Surgery 44.10 (Oct. 2020), pp. 3324–3332. DOI: 10.1007/s00268-020-05614-y.
- Nguyen, Minh-Thuy, **Feeney, Timothy**, Chanmin Kim, F. Thurston Drake, Suzanne E. Mitchell, Magdalena Bednarczyk, and Sabrina E. Sanchez. "Patient-Level Factors Influencing Palliative Care Consultation at a Safety-Net Urban Hospital". In: *American Journal of Hospice and Palliative Medicine* (Dec. 16, 2020), p. 104990912098176. DOI: 10.1177/1049909120981764.
- Castillo-Angeles, Manuel, Tarsicio Uribe-Leitz, Molly Jarman, Ginger Jin, **Feeney, Timothy**, Ali Salim, and Joaquim M. Havens. "Transferred Emergency General Surgery Patients Are at Increased Risk of Death: A NSQIP Propensity Score Matched Analysis". In: *Journal of the American College of Surgeons* (Jan. 2019). DOI: 10.1016/j.jamcollsurg.2019.01.014.
- **Feeney, Timothy**, Michael Cassidy, Yorghos Tripodis, David McAneny, Maureen Kavanah, Teviah Sachs, Jennifer F. Tseng, and Frederick Thurston Drake. "Association of Primary Language with Outcomes After Operations Typically Performed to Treat Cancer: Analysis of a Statewide Database". In: *Annals of Surgical Oncology* 26.9 (Sept. 2019), pp. 2684–2693. DOI: 10.1245/s10434-019-07484-8.
- Feeney, Timothy, Sabrina Elena Sanchez, Yorghos Tripodis, Tejal Sudhirkumar Brahmbhatt, Robert Schulze, Peter Burke, Tracey Dechert, and Frederick Thurston Drake. "The Association of Primary Language With Emergency General Surgery Outcomes Using a Statewide Database". In: *Journal of Surgical Research* 244 (Dec. 2019), pp. 484–491. DOI: 10.1016/j.jss.2019.06.082.
- **Feeney, Timothy**, Stephanie Talutis, Megan Janeway, Praveen Sridhar, Avneesh Gupta, Philip E. Knapp, James Moses, David McAneny, and Frederick Thurston Drake. "Evaluation of Incidental Adrenal Masses at a Tertiary Referral and Trauma Center". In: Surgery (Oct. 2019). DOI: 10.1016/j.surg.2019.07.034.
- Nguyen, Minh-Thuy, **Feeney, Timothy**, Chanmin Kim, F. Thurston Drake, Suzanne E. Mitchell, Magdalena Bednarczyk, and Sabrina E. Sanchez. "Differential Utilization of Palliative Care Consultation Between Medical and Surgical Services". In: *American Journal of Hospice and Palliative Medicine* (Aug. 6, 2019), p. 104990911986790. DOI: 10.1177/1049909119867904.
- Drake, Frederick Thurston, Toni Beninato, Maggie X. Xiong, Nirav V. Shah, Wouter P. Kluijfhout, **Feeney, Timothy**, Insoo Suh, Jessica E. Gosnell, Wen T. Shen, and Quan-Yang Duh. "Laparoscopic Adrenalectomy for Metastatic Disease: Retrospective Cohort with Long-Term, Comprehensive Follow-Up". In: *Surgery* (Dec. 2018). DOI: 10.1016/j.surg.2018.11.008.
- Feeney, Timothy, Manuel Castillo-Angeles, John W. Scott, Stephanie L. Nitzschke, Ali Salim, Adil H. Haider, and Joaquim M. Havens. "The Independent Effect of Emergency General Surgery on Outcomes Varies Depending on Case Type: A NSQIP Outcomes Study". In: *The American Journal of Surgery* 216.5 (Nov. 2018), pp. 856–862. DOI: 10.1016/j.amjsurg.2018.03.006.

- Ghuman, Amandeep, Simon D. Dryden, **Feeney, Timothy**, Daniel H. Buitrago, and P. Terry Phang. "Prophylactic Use of Alpha-1 Adrenergic Blocking Agents for Prevention of Postoperative Urinary Retention: A Review & Meta-Analysis of Randomized Clinical Trials". In: *The American Journal of Surgery* 215.5 (May 2018), pp. 973–979. DOI: 10.1016/j.amjsurg.2018.01.015.
- Jang, Yoon J., Abigail L. LaBella, **Feeney, Timothy** P., Nancy Braverman, Mendel Tuchman, Hiroki Morizono, Nicholas Ah Mew, and Ljubica Caldovic. "Disease-Causing Mutations in the Promoter and Enhancer of the Ornithine Transcarbamylase Gene". In: *Human Mutation* 39.4 (Apr. 2018), pp. 527–536. DOI: 10.1002/humu. 23394.
- Feeney, Timothy, Lori Lyn Price, Lilian Chen, Roger Graham, and Abhishek Chatterjee. "Resident and Fellow Participation in Thyroid and Parathyroid Surgery: An ACS-NSQIP Clinical Outcomes Analysis". In: *Journal of Surgical Research* 220 (Dec. 2017), pp. 346–352. DOI: 10.1016/j.jss.2017.07.030.
- Laser, Adriana, Brandon R. Bruns, Joseph A. Kufera, Andrew I. Kim, **Feeney, Timothy**, Ronald B. Tesoriero, Margaret H. Lauerman, Clint W. Sliker, Thomas M. Scalea, and Deborah M. Stein. "Long-Term Follow-up of Blunt Cerebrovascular Injuries: Does Time Heal All Wounds?" In: *Journal of Trauma and Acute Care Surgery* 81.6 (Dec. 2016), pp. 1063–1069. DOI: 10.1097/TA.0000000000001223.
- Lauerman, Margaret H., **Feeney, Timothy**, Clint W. Sliker, Nitima Saksobhavivat, Brandon R. Bruns, Adriana Laser, Ronald Tesoriero, Megan Brenner, Thomas M. Scalea, and Deborah M. Stein. "Lethal Now or Lethal Later: The Natural History of Grade 4 Blunt Cerebrovascular Injury". In: *Journal of Trauma and Acute Care Surgery* 78.6 (June 2015), pp. 1071–1075. DOI: 10.1097/TA.0000000000000654.
- Pho, Nam, Dino R C Magri, Fernando F Redigolo, **Feeney, Timothy**, and given-i=CJ family=Patel given=CJ given-i=CJ given=CJ. "Data Transfer in a Science DMZ Using SDN with Applications for Precision Medicine in Cloud and High-performance Computing". In: Supercomputing '15: ESnet SDN Workshop. Austin, TX, 2015, p. 4.
- LaBella, Abigail Leavitt, **Feeney, Timothy**, Sandra Kirsch Heibel, Mendel Tuchman, and Ljubica Caldovic. "Comprehensive Bioinformatic Analysis of Urea Cycle Gene Transcription Regulation Using Cis-Element over Representation (CLOVER) Software and Patient Sequences to Identify Disease Causing Mutations". In: *Molecular Genetics and Metabolism*. Vol. 102. 2011, pp. 297–297.
- LaBella, Abigail Leavitt, **Feeney, Timothy**, Sandra Heibel, Mendel Tuchman, and Ljubica Caldovic. "Analysis of Urea Cycle Gene Transcription Regulation Using Bioinformatic Software and Patient Sequences". In: *The FASEB Journal* 25 (1\_supplement 2011), pp. 564.8–564.8. DOI: 10.1096/fasebj.25.1\_supplement.564.8.

## Non-Research

- **Feeney, Timothy**, Tiago Villanueva, and Amy Price. "Communicating the Benefits and Harms of Anticancer Drugs". In: *BMJ* (Mar. 29, 2023), p623. DOI: 10.1136/bmj.p623.
- Her, Qoua L., Neil Dhopeshwarkar, and **Feeney, Timothy**. "Critique of fffdfffdfffdAngiotensinfffdfffdfffdconverting Enzyme Inhibitors Reduce Communityfffdfffdfffdacquired Pneumonia Hospitalization and Mortalityfffdfffdffd". In: *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy* 43.3 (Mar. 2023), pp. 257–258. DOI: 10.1002/phar.2773.
- Feeney, Timothy and Charles Poole. "Self-Testing for Covid-19". In: BMJ (Sept. 14, 2022), o2055. DOI: 10.1136/bmj.o2055.
- Islam, Nazrul, Tim J Cole, Joseph S Ross, **Feeney, Timothy**, and Elizabeth Loder. "Post-Submission Changes to Prespecified Statistical Analysis Plans". In: *BMJ* (Sept. 21, 2022), o2244. DOI: 10.1136/bmj.o2244.

## **Podium**

- "Better Analysis of RCTs". Aug. 26, 2022.
- "A Simplified Method to Account for Multiple Case Adjustment in Regression Modeling." Feb. 2020.
- "Challenges in the Management of Adrenal Incidentalomas: One Year at an Urban Level I Trauma Center". Feb. 2019.
- "The Effect of Primary Language on Emergency General Surgery Outcomes: A Statewide Database Study." Feb. 6, 2019.
- "Non-English Language and Outcomes in Emergency General Surgery". 2018.
- "The Effect of Trainee Involvement on Patient Outcomes in General Surgery Cases Over Time." Jan. 2018.
- "Resident and Fellow Participation in Thyroid and Parathyroid Surgery: An American College of Surgeons NSQIP Clinical Outcomes Analysis". Sept. 2016.
- "Hemoperitoneum Due to Traumatic Avulsion of a Single Leiomyoma Following a Motor Vehicle Collision". 2014.
- "Through the Looking Glass: Telemedicine as a Potential Cure for the Community Intensivist Shortage". 2014.
- "Investigation of miRNA-directed Control of LDL Receptor Expression". 2009.
- "Mutations in an Ornithine Transcarbamylase Regulatory Region as a Possible Cause for Reduced Expression in Patients with Ornithine Transcarbamylase Deficiency". 2008.

## Poster Poster

Better Analysis of RCTs. Poster Presentation. Chicago, IL, 2022.

Limited English Proficiency Is Not Associated with Worse Outcomes after Bariatric Surgery. Boston, MA, Dec. 2019.

Effect of Limited English Proficienty on Outcomes Following Cancer Operations. Poster Presentation. 2018.

Epidemiology of Incidental Adrenal Masses at an Urban Tertiary Referral and Trauma Center. Poster Presentation. 2018.

The Effect of Primary Language on Outcomes Following Cancer Operations Using a Statewide Database. Poster Presentation. 2018.

Morbidity and Mortality of Emergency General Surgery Based on National Burden. Poster Presentation. 2017.

Genetic Regulation of OTC in the Urea Cycle. Poster Presentation. 2009.

# **Co-Authored**

- "Pathologic Response after Neoadjuvant Endocrine Therapy for Breast Cancer: 25 Year Experience from a Single Institution". Mar. 2023.
- "Race as a Determinant of Palliative Care Consultation at a Safety-Net Urban Hospital". Feb. 4, 2020.
- "Improving Communication and Evaluation of Incidental Adrenal Findings". Nov. 12, 2019.

- "Surgical and Oncologic Outcomes of Open Versus Laparoscopic Distal Pancreatectomy in a Low-volume Setting". Sept. 13, 2019.
- "The Association of Primary Language with Outcomes after Cancer Operations at a Single Tertiary Referral Center and Safety Net Hospital." Sept. 13, 2019.
- "Medical Student Perceptions Following Participation in a Surgical Boot Camp fffdfffdfffd A Qualitative Analysis." Feb. 5, 2018.
- "Transferred Emergency General Surgery Patients Are at Increased Risk of Death". Sept. 23, 2018.

### INVITED PRESENTATIONS

- 2023 Open-Peer Review: towards greater transparency in the publishing process (tentative title)
  - Presented at: SciElo 25th Anniversary, So Paulo, Brazil
- 2020 Efforts to Increase Evidence Based Follow-up of Incidental Adrenal Masses at BMC and Beyond.
  - Presented at: The Boston Medical Center Surgery Research Conference
- 2019 The association of limited English proficiency with outcomes after cancer operations; perspectives from a large database and single center study
  - Presented at: The Boston Medical Center Annual Mozden Visiting Professorship Conference
- 2019 Hierarchical/Multilevel Modeling: An Introduction
  - Presented at: BU Surgery Resident Research Seminar
- 2019 Conceptual Models for Regression Analysis in Observational Data: Confounding, Mediation, and Effect Modification
  - Presented at: BU Surgery Resident Research Seminar

## PROFESSIONAL ACTIVITIES

- 2021 Present: Epidemiology Program Senator, UNC Graduate and Professional Student Government
- 2021 Present: Epidemiology Representative, UNC Gillings Student Government
- 2019 Present: MDEpiNet Executive Operations Committee
- 2019 2023: Society for Epidemiologic Research-Communications Committee

### HONORS AND AWARDS

2022	Featured Article/ Cover Article in J. Surg Research for "Incidental Adrenal Masses: Adherence
	to Guidelines and Methods to Improve Initial Follow-up, A Systematic Review"
2018	Winner of the Annual MA ACS Committee on Trauma Resident/Fellow Paper Competition
2017	UC Berkeley Social Sciences Research Transparency and Reproducibility (BITSS-RT2) Scholar-
	ship
2016	Tufts Annual Resident Research Day Finalist
2014	Medical School Capstone Research Project Finalist
2014	Clinical Honors: Acute Care Surgery, Trauma Surgery, Anesthesia, and Community Medicine
2008	Cell Bio and Molecular Genetics Program Distinguished Graduating Student
2008	University of Maryland, College Park Senior Marshal
2005-2008	Distinguished Deans List
2007-2008	College of Chemical and Life Sciences Outstanding Student

## MEDIA APPEARANCES

July 2023	NPR Short Wave Podcast- Discussion about research in The BMJ Christmas Issue
Dec 2022, 2021	BMJ Talk Evidence Podcast- Talking about highlights from the research section of the
	annual Christmas issue.

#### STUDENT MENTORSHIP

## Julia Kessel - UNC-CH Medical Student, Chapel Hill NC

2022-2023

Project: PEG placement and recurrence of paraesophageal hernia

## Christine Park-BU Medical Student, Boston MA

2018-2019

Project: Association of Language with Operative Outcomes at a Tertiary Safety Net Hopsital-A Single Center Study Ouptut: Manuscript under review Current Position: Internal Medicine Resident, Weill Cornell

## Gus Godley-BU MD MBA Student, Boston MA

2018-2020

Project: The association of primary language with outcomes after cancer operations at a single tertiary referral center and safety net hospital.

Output: Podium Presentation at the American College of Surgeons 2019 Annual Meeting Poster Presentation at the New England Surgical Society 2019 Annual Meeting

Current Position: General Surgery Resident, Univ of Chicago

## Minh-Thuy Nguyen - BU Medical Student, Boston MA

2018-2020

Project: Disparities in the utilization of palliative care consultations

Output: Differential Utilization of Palliative Care Consultation between Medical and Surgical Services—manuscript published

Output: Patient-Level Factors Influencing Utilization of Palliative Care Consultation at a Safety-Net Urban Hospital-abstract submitted to 2020 Academic Surgical Congress

Current Position: Interventional Radiology Resident-Brigham and Women's Hospital

## Andrea Alonso - BU Medical Student, Boston MA

2019-2020

Project: Bariatric surgery and language outcomes

Project: Systematic Review of Language Discordance and Outcomes in Inpatient, Emergency, and Surgery Settings Current Position: General Surgery Resident, Boston University

#### TEACHING EXPERIENCE

### Teaching Fellow, UNC Chapel Hill, Chapel Hill, NC

Spring 2023

## Course: EPID715 Theory & Quantitative Methods in Epidemiology

Designed homework, quiz, and test material. Primarily responsible for grading. Delivered review lectures and material. Provided one on one teaching during office hours.

### Teaching Fellow, UNC Chapel Hill, Chapel Hill, NC

Fall 2020, 2021

## Course: EPID711 Clinical Measurement and Evaluation

Duties; Delivered causal inference lecture, grading, leading office hours, content reviews

### Resident Instructor, Tufts Medical Center, Boston MA

2014-2016

Taught medical students about patient care, general surgery and critical care

### Math and Science Tutor, Baltimore MD

2008-2010

Tutoring high school students from disadvantaged Baltimore area schools

## Course Instructor: Weill-Cornell Youth Scholars Program, New York NY

2008

Summer program to mentor less advantage underrepresented minority high school students in STEM

## Undergraduate Teaching Assistant, College Park, MD

2006

Taught General Microbiology

#### PREVIOUS RESEARCH EXPERIENCE

## Research Assistant

08/2020-01/2021

Dept. of Medicine–UNC Medical Center, Chapel Hill, NC.

Investigating outcomes using CNICS multicenter data.

#### Post Doctoral Research Fellow

11/2017-07/2020

Dept. of Surgery-Boston University/Boston Medical Center, Boston MA.

Advisor: F. Thurston Drake

Clinical Epidemiology and Bio-statistics Researcher, Project Supervisor

Designed, implemented, and analyzed longitudinal prospective quality improvement initiative

Performed multiple large observational database studies using both Frequentist and Bayesian methods

Study design and analysis consulting

## Brigham and Womens Hospital, Boston, MA

11/2016-11/2017

Post Graduate Researcher

Advisor: Joaquim Havens

Investigating surgical clinical outcomes using NSQIP database

Extensive use of SAS, R and Stata

## Tufts Medical Center, Boston, MA

11/2015-05/2016

Resident Researcher

Advisor: Abhishek Chatterjee

Investigating resident impact on surgical outcomes

## R. Adams Cowley Shock Trauma Center, Baltimore, MD

11/2013-5/2014

Student Clinical Researcher

Evaluated outcomes of patients with blunt cerebrovascular injury

## University of Maryland School of Medicine, Baltimore, MD

2009-2010

Department of Biochemistry and Molecular Biology

Researched miR10 and its role in Pediatric Leukemias

Techniques used: PCR, Real-time PCR, RNA extraction/isolation,

Cell Culture, Western Blotting, Agarose Gel extraction and electrophoresis,

bacterial cloning.

## Childrens National Medical Center, Washington DC

2006-2008

Undergraduate Research

Research on the Urea Cycle

Techniques used: PCR, PCR, Sanger Sequencing, Bioinformatics

(BLAST, CLUSTALW, alignment manipulation, Transfac database and

transcription factor binding site prediction modeling)

### **LEADERSHIP**

2021-Present Epidemiology Program Senator, UNC Graduate and Professional Student Gov.

2021-Present Epidemiology Graduate Rep., Gillings Student Gov.

2009-2010 Vice-President, Medical Student Journal Club

2009-2010 Research Vice-President, Infectious Disease Interest Group

2009-2011 Student Council Representative, UMSOM MD/PhD Student Council

2008 Site Manager and Program Coordinator, Weill-Cornell Youth Scholars Program

2007-2008 Student representative, UMD CFLS Deans Advisory Board

2003-2004 Apparatus Engineer, Community Volunteer Fire Co. No. 1

## PREVIOUS SELECTED ACTIVITIES

2002-2005 Firefighter, Community Volunteer Fire Company No. 1

2003-2005 Emergency Medical Technician, West Milford First Aid Squad

2010-2012 MSTP Advisory Board Student Representative

2009-2011 MSTP Curriculum Design Committee

2009-2012 Science Editor, Dual Decree MD/PhD Program Newsletter

2008-2010 Webmaster, UMD AMA Student Section

## AD HOC PEER REVIEW

JAMA Surgery, SURGERY, Society for Epidemiologic Research, Journal of Surgical Research, American Journal of Surgery, World Journal of Surgery, Population Health Metrics

## PREVIOUS GRANT AWARDS

2007 Howard Hughes Medical Institute Undergraduate Research Fellowship

### **CERTIFICATIONS**

2015 Advanced Trauma Life Support (ATLS)

2014 Fundamentals of Critical Care Support (FCCS)

Firefighter I, Firefighter II, Vehicle Rescue Technician, Ice Rescue Technician, Incident Management 100, 200, and 700, Federal Wildland Firefighter, AHA CPR, GUE Technical Trimix Diver, GUE Full Cave Diver, International Conflict Management

### SKILLS AND INTERESTS

R Statistical Software: intermediate to advanced skill with data visualization, descriptive statistics, multivariable regression, and simulation

SAS statistical software: intermediate skill with data visualization, descriptive statistics, multivariable regression, macro coding

STATA statistical software: intermediate to advanced skill with data visualization, descriptive statistics, multivariable regression

Python: basic skill

Git: basic skill; clone commit push pull

LATEX: basic skill

Microsoft Office Suite: Advanced

#### Interests:

Surgery (Trauma and Acute Care), Critical Care, Causal Inference, Bayesian Methods, Biochemistry, Mathematical Biology, and Molecular Biology